

# **Conditional Norms: Bureaucratic Reform and the Internationalization of Statistics in Russia**

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All reliable national statistics are alike. All unreliable national statistics are unreliable in their own way. Since the 1960s, most countries of the world have been moving toward implementation of the international System of National Accounts (SNA). The SNA is a massive, coordinated, institutional apparatus that sets out thousands of rules for measuring economic activity that are consistent across countries and therefore allows for the international commensurability of economic data. Nowadays, economic indicators such as Gross Domestic Product (GDP) are almost taken for granted; but their development and increasingly widespread use was actually the product of scientific advances in several fields as well as highly coordinated political action in the mid-20th century.

Moreover, before the end of the Cold War and the collapse of communism as an alternative to capitalism, the Soviet statistical system stood as an unrelenting alternative to the SNA. This difference in the ways in which the economies – and indeed countries themselves – could be evaluated and measured was a crucial aspect of the Cold War. Decades of work by hundreds of people in the governments of the USA, USSR, as well as international organizations such as the UN, were devoted to comparing Soviet and American economic activity in order to figure out which country, and which system, communism or capitalism, was economically superior. Had the Soviets used the same system of national accounts and provided reliable GDP figures, they would have provided a tremendous amount of information about specific sectors of the economy both to the outside world and to their own citizens, and it would have been much harder to hide the country's post-war economic decline.

But ideological differences are not the only impediment to implementation of the SNA. The production of all of the indicators required by the SNA requires resources, knowledge, and massive organizational infrastructure, and therefore it is not so surprising that the countries which have advanced furthest in implementation of the SNA include the mainly the wealthiest and most economically developed nations, e.g. OECD countries, while the poorest nations and those in turmoil due to war, have fulfilled the least number of SNA requirements.

The United Nations has recently rated 185 countries of the world in terms of implementation of the SNA on the basis how much completed data countries have submitted to the UN.<sup>1</sup> They devised a 7-point scale that ranges from 0 to 6. There are some predictable differences between regions of the world: the mean for North America (which includes only the USA and Canada) is 6; for Australia it is 5; for the 22 countries of Western Europe the mean is 3.14; and the mean for the 53 countries in Africa is 0.79. Interestingly, Russia scores a 2. This might not seem so impressive until you consider that the mean score for all countries is 1.6 and that only 33 out of 185 countries score better than Russia, and 94 are worse (55 are the same).

The Russian level of implementation of the SNA is remarkable for a number of reasons. First, although there is a large degree of consensus on the need for all countries to move to the SNA, the overall rationality of the ends has rarely been enough to ensure successful institutional reform. The actual implementation of the SNA around the world has varied widely, and few countries have achieved a score of "2" in such a short period of time.

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<sup>1</sup> (United Nations Statistical Commission 1999) This 1999 data has been adjusted according to notes in the document.

Second, until the late 1980s, the Russian statistical agency, Goskomstat, had had no prior experience with the SNA, and indeed Goskomstat as an organization had been totally devoted to an alternative type of statistical system.<sup>2</sup> The lack of price-based indicators and the absence of the SNA symbolized a hallmark of Soviet economic statistics, namely, their incommensurability with statistics of other countries. The move to the SNA in Russia therefore constituted a radical break with the Soviet past.

Third, within Russia, most institutional reforms in the 1990s failed, so this experience with the SNA stands in marked contrast to other attempts to reform the Russian state bureaucracy. In addition, the economy of Russia during the main period of the shift to the SNA, the early 1990s, was in a period of intense contraction and record-breaking negative growth, resulting in severely limited resources for institutional reform across the board. Goskomstat was and remains a particularly low prestige, poor state bureaucracy; it was not a high profile target for state or societal actors interested in reform.

Fourth, Goskomstat was an extremely conservative, "Soviet" style organization, marked by hierarchy, secrecy, and relatively limited access to foreigners or outsiders. The organization was not taken over by "reformers" and the SNA reforms were largely implemented by bureaucrats who had worked at Goskomstat for decades, and who had previously worked on the Soviet statistical system. Indeed the zeal of Soviet statisticians for the SNA – i.e. the internal interest in reform – was unexpected.

Fifth, although the SNA constitutes a case of major success in bureaucratic reform, not everything was reformed at Goskomstat. Methods relating to demographic statistics, primarily exemplified by methods used during the 2002 census, were not radically reformed. This presents a second puzzle, namely that while there was radical reform of economic statistics in the shift to the SNA, within the same organization, there was little change in demographic statistics.

The move to the international System of National Accounts by the Russian State Statistical Committee (Goskomstat) in the 1990s is an improbable and remarkable story of major institutional reform in a very short period. The establishment of the SNA represented a major step towards bringing the content and categories of Russian economic statistics in line with international standards. But the question is not just why did Russia decide to move to the SNA; rather, it is how was Goskomstat – a backward, poor, Soviet-type organization – willing and able to achieve such a high degree of implementation of this particular reform so quickly, and why did other reforms at the organization fail. Understanding this case will shed light on the process of state institutional reform, and bureaucratic reform in particular, in the context of international standards and severe domestic constraints. Essentially I argue that the implementation of the SNA in Russia can be explained by conditional Soviet norms that specified that a country's statistical system should match the structure of the economy; for Goskomstat employees, when Russia introduced prices in 1992, this structural economic change necessitated a change to the SNA, thus accounting for the change in interests in favor of reform among Russian statisticians.

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<sup>2</sup> In March of 2004, Goskomstat Rossii (State Committee for Statistics of Russia) was officially renamed the Federal Service for State Statistics, but it is still commonly called Goskomstat. There were also a few name changes in the late 1980s and 1990s. Throughout the paper, for consistency and to reduce confusion, I refer to the institution by the name Goskomstat.

Below, I begin with a review of the theoretical literature in international relations and comparative politics on bureaucratic reform. I then outline my theory of conditional norms. Next, I examine the case of Russia's shift to the SNA, and I consider the observable implications of my theory using data from other countries. The analysis is based on archival material from Moscow, content analysis of Goskomstat publications over a 19-year period, fieldwork in 11 regions of Russia and Washington, D.C. yielding over 75 interviews with a range of people who worked in or with Goskomstat on the SNA, and, last but not least, quantitative analysis of UN data.

## **Explaining Bureaucratic Reform**

An explanation of the shift to the SNA in Russia does not fit neatly into disciplinary boundaries. On the one hand it is about the relationship between international standards and domestic outcomes, and hence situated in the international relations (IR) literature, but on the other hand it is also about state building and policy choice, hence more in the comparative politics tradition. There have been many notable attempts to bridge the IR and comparative literatures (Gourevitch 1978; Putnam 1988; Rogowski 1989; Moravcsik 1993; Keohane and Milner 1996; Caporaso 1997), and building on that tradition, in this study I similarly consider a range of factors, both domestic and international in origin.

I argue that a theory of institutional reform has the triple burden of explaining 1) the motivation or interests of specific actors for a particular reform, 2) the timing of the reform, and 3) the actual implementation of the reform. Many existing theories of institutional reform focus on one or another of these explanations, but not all three. Below, I discuss three broad approaches to the question of bureaucratic reform: interests and organizational structure; economic conditions and incentives; and norms and identities, including my theory of conditional norms, which I argue makes theoretically explicit the link between norms and the conditions under which they operate. Each of these theoretical approaches speak to the issue of interests or incentives in reform and as well as the timing and implementation of reform.

### ***Interests and organizational structure:***

Actors and their interests are a frequently cited explanation for policy change and institutional reform. In explaining the transformation of a state institution and a major change in state policy, the state as a unified actor is not very helpful.<sup>3</sup> We have to instead move to the level of actors within the state, society, or the international community. Various domestic non-state interest groups as well as state actors may have interests in reform, or not. According to these theories, reform is the outcome of a struggle among domestic and/or international actors who have an interest in reform. John Kingdon's concept of "policy entrepreneurs" refers to bureaucrats who push specific policies or ideas (Kingdon 1995, 179-183) and is consistent with theories that suggest that policy support among actors within the state is crucial for reform outcomes

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<sup>3</sup> Similarly, the concept of national interest (Krasner 1978, 10-14; Wendt 1996; Campbell 1998, 68) is not so useful in explaining variation in domestic policy and state institutional change because it does not vary within the state.

(Gourevitch 1989).<sup>4</sup> But actors outside the state may similarly have a substantial impact on policy agreement and implementation through their support (Robertson 1991, 68; Jenkins-Smith and Sabatier 1993; Rose 1993, 44-45) or lack of opposition (Heclo 1974, 315-316; Krasner 1978, 15-17, 138, 323, 337-347; Berman 1998, 34-35). International organizations (Finnemore 1993) and transnational networks (McAdam and Rucht 1993; Evangelista 1999) can similarly exert great influence on changes in domestic state policies. A formidable challenge for theories of domestic interests, is that the identified interests must be shared by bureaucrats who are actually charged with undertaking reform. While the interplay of interests by state officials and lobbyists no doubt affects policy in general, specific policy or institutional changes must be examined in terms of the interests of the relevant actors, in particular those in specific bureaucratic organizations. Theories of organizational structure go some way towards addressing this concern.

Information and knowledge can be considered a resource (Heclo 1974), but there is a social component to information with regard to institutional reform in that bureaucrats often get new information about reform from actors outside the organization. There is also now a large literature on the effects of institutional engagement with international actors in terms of "epistemic communities" or "linkage" of domestic policies and state-building (Haas 1989, 1992; Finnemore 1993; Keck and Sikkink 1998). However, knowledge and the learning process is not a seamless, uncomplicated, or one-way process.<sup>5</sup> The concept of unidirectional knowledge transfer has by now been supplemented by research that suggests collaborative two-way knowledge networks. In their examination of the spread of neoliberalism in Eastern Europe, Bockman and Eyal rejected the one-way diffusion model, where Western experts give advice to their novice East Europeans counterparts, and instead Bockman and Eyal treat neoliberalism as a network itself, which is a continuation of the economic laboratory for discussion and debate over economic policy that existed in socialist times (Bockman and Eyal 2002). This network approach provides a different mechanism for observed isomorphism (DiMaggio and Powell 1991b). Nevertheless, these theories of information transfer and social learning do converge on the idea that reform may be a function of information, and that the more interaction that bureaucrats have with outside reformers, the more likely is information exchange and hence reform.

In any bureaucracy, the institutional context, including the organization's authority structure and capacity, as well as the larger assemblage of institutions in which that organization is embedded, will affect the ability of the institution to carry out reform through effects on power, personnel, incentives, and resources; in short, the organizational structure may affect the constellation of actors and which interests get represented. In explaining policy change, some have focused on the institutional

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<sup>4</sup> On the question of how the interests of certain domestic actors may explain a state's willingness to sign on to an international agreement, even if the state as a whole is worse off, see (Cortell and Davis 1996; Goldstein 1996)

<sup>5</sup> Hunter and Brown have recently shown that there has not been as much actual "learning" by countries as one might expect, despite the research on diffusion of ideas and "teaching" by international organizations, such as by (Finnemore 1993, 1996). They examine actual education policy in Latin America from 1980 to 1992, and show that despite policy pronouncements, there hasn't been much implementation of increasing government spending on education or shifting government spending to primary education (Hunter and Brown 2000).

authority structure of domestic institutions, including bureaucratic support and authority over implementation. (Goldstein 1988; Hall 1989, 374; Sikkink 1991; Goldstein 1993; Yee 1996, 88-92) or administrative capacities (Weir 1992; Risse-Kappen 1994; Checkel 1997). The effects of organizational structure on bureaucratic reform may be contradictory. On the one hand, closed, centralized, hierarchical organizations are less "democratic," and hence less open to change and less likely to receive new ideas or knowledge. But on the other hand, such closed organizations are also less subject to competing interests within, and thus when new policy directives are embraced by the leadership closed, hierarchical organizations have greater capacity to implement reform.<sup>6</sup>

As explanations for bureaucratic reform, theories of domestic interests and organizational structure, shift our attention to actors, their interests, and institutional context, but they also raise another question, namely, where do interests come from and in particular, where does the interest in reform come from? The answer could lie in the arrival of actors with different interests in positions of power, but if the array of actors does not change, then the question arises of how the same set of actors become interested in reform, or in other words how do you get seasoned bureaucrats to change course? This question cannot be answered if interests are taken for granted.

### ***Economic conditions and incentives***

The relationship between international economic conditions and domestic economic policy and institutional reform has been studied extensively and with increasing nuance.<sup>7</sup> Some theories have focused on how international economic conditions affect preferences of domestic actors in terms of coalitional politics (Rogowski 1989), sectoral reactions (Frieden 1991), firm reactions (Milner 1988), and asset portfolios (Frieden and Rogowski 1996), and how those are institutionally mediated (Garrett and Lange 1995).<sup>8</sup> The crux of the economic interest-based argument for state institutional reform stresses global and domestic economic conditions, and the related economic interests of actors that follow from those conditions, as the motivation behind state economic policies and institutional development. According to these theories, reform should be likely when domestic actors stand to gain from reform incentives generated by economic conditions. In any economic conditions argument, however, whether focusing on domestic or international conditions, the explanation for bureaucratic reform hinges on an actual link between the conditions of the global or domestic economy and specific actors charged with carrying out institutional reform.

Rather than just thinking of economic conditions in terms of the global *or* domestic economy, there may be economic incentives generated by conditions in a select group of other states. Economic diffusion theories (Simmons and Elkins 2004) are a way of capturing the spatial configuration of economic incentives. In this case

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<sup>6</sup> The logic of this argument for bureaucratic reform can be derived from Evangelista's findings regarding the effects of transnational communities on security policy in closed states (Evangelista 1995).

<sup>7</sup> For overviews see (Gourevitch 1978; Murphy 1994; Keohane and Milner 1996).

<sup>8</sup> Recent work, however, has suggested that globalization does not constrain national economic policy choices as much or as smoothly as previously thought (Weatherford 1988; Garrett 1998; Kaufman and Segura-Ubiergo 2001).

reform would be the result of the incentives that flow from the actions of other states on the same issue.

Economic conditions can affect not only incentives for reform, but also the resources, which can be in the form of material or human capital available for reform. Material resources are needed to pay for equipment as well as to hire and retrain staff, while human capital including skills and experience are necessary to undertake new or difficult tasks. Resources that an organization's management has at its disposal comprise the basis for material incentives of bureaucrats on the ground, but an organization's overall budget is not necessarily determinative of reform. Reform might be more likely when resources are less constrained overall; however, in tight budgetary circumstances material incentives might be used selectively to support reformers, therefore creating organizational incentives for reform.

Finally, incentives and resources are not only materially based. There may be other non-material rewards that individuals or groups seek to maximize and hence incentives and resources should be thought of more broadly, beyond material gain; for example individuals or groups might seek greater security, prestige, pride, honor, and the well-being of others. The metrics for understanding non-material rewards are, however, often more complicated than the type of cost-benefit analysis typically used to understand material rewards. The vast literatures on norms, identity, ideas, and cognitive or psychological biases speak to the issue of non-material incentives, but in many cases these literatures also provide theories of behavior that are not based on the concept of maximization, of either material or non-material rewards.

### ***Norms and identities***

Norms are informal rules. These rules contain prescriptions for appropriate behavior or action, e.g. "logics of appropriateness." Norms structure behavior by providing a set of legitimate and acceptable, as well as unacceptable actions. This process of legitimation may be more or less contested, resulting on the one end of the spectrum in the hegemony of certain ideas and actions and the "unthinkability" of alternatives, or on the other end of the spectrum in providing a plan of action that is contested or limited to certain conditions. Contestation of norms may occur at many levels, international, national, and local, or within groups or organizations themselves. The more agreement or consensus on a norm, the more likely it is to be followed and therefore have a behavioral impact. Moreover, there is great variability in norm contestation due to the substance of issues involved. For example, high-profile consequential actions which are easy to monitor (e.g. funeral rites or automobile driving practices) are more likely to have uncontested norms, if not formal rules, than are less-consequential or difficult to monitor actions (e.g. pre-school graduation ceremonies or walking on sidewalks).

The literature on norms often overlaps with ideational approaches (Berman 2001), and scholars have considered ideas in a range of institutional outcomes, for example, in the development of political parties (Berman 1998) and in the development of international organizations (Finnemore 1996; Boli and Thomas 1999). In accordance with some important constructivist interventions by Laffey and Weldes, and Blyth (Blyth 1997; Laffey and Weldes 1997), I think it reasonable to define ideas as cognitive structures; that is, they structure the way in which actors understand the world and filter

or produce knowledge, and they cannot be reduced simply to information.<sup>9</sup> Ideas, as socially-held cognitive structures, are no doubt important to the development of norms. However, a crucial difference between norms and ideas is that norms necessarily entail a behavioral prescription in the form of a set of prescribed institutionalized practices, whereas ideas do not necessarily have such a behavioral component. For example, an idea may be that "under socialism, life was good," but a norm would make prescriptions in the form of "under socialism, there should be no private property, there should be only one party, etc."

Norms are not universal rules; instead they are prescribed by, or are constitutive of, social or organizational identities. In international relations, norms are often considered a function of state identities, where states are motivated to do things that are consistent with their identity (Katzenstein 1996). The organizational identity literature in sociology, while not necessarily using the language of norms, essentially suggests that action in institutional reform is motivated by identity and legitimacy concerns rather than by material calculations or the functional needs of the state (DiMaggio and Powell 1991a). Theories of bureaucracy that focus on building an "esprit de corps" in order to motivate employees are other examples in which being part of a group has an effect on bureaucratic behavior (Kaufman 1960; Dilulio 1987). These theories in which norms are linked to organizational identities, suggest that sharing an identity will entail sharing a set of norms – informal rules with behavioral components – and hence the mechanism by which identities affect behavior is shared norms.

Identities may be based on state, national, or ethnic identity, but organizational and professional identities are also a likely source of bureaucratic norms. Professional networks of actors embody particular behavioral norms and ideas about what the world is. But the meaning of "professional," and the content of professional norms varies greatly, as different groups have different values, including the veneration of modernity, science, the family, individualism, liberalism, etc., and these values exist in larger societal and international contexts in which the status of certain values may vary (i.e. the prestige of science in the 20th century versus the 16th century).

To the extent that bureaucrats consider themselves part of an international community, say of statisticians, they are more likely to be influenced by the norms of that community. Where institutional reforms are consistent with the professional norms or organizational identities, and where there is consensus over such norms, reform is more likely. Norms, in contrast to material maximization, constitute a different way of addressing interests or motivations, and a claim about non-material incentives, though they are not incompatible with material maximization – for example, Fortune 500 executives may share interests in maximizing profits of their firms as well as number of other professional norms, such as wearing suits or flying business class.

### *Conditional norms*

A challenge to norm-based arguments is to specify when particular norms are at work. I argue that many norms actually may be *conditional*; that is, they are in effect

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<sup>9</sup> Often ideas are used as a substitute for information (Goldstein and Keohane 1993, 17; Weingast 1995; Golob 2003). For example, (Weingast 1995) argues that if there were complete information, ideas would not be necessary. If ideas are to be reduced to information it seems more parsimonious to just call them "information."



only under certain conditions. As a starting point, identities often constitute general limitations on norms because a particular norm is likely to be known about, accepted, and followed by members of a particular group, while other groups may not know about or may contest the norm. For example, greeting practices, e.g. shaking hands, hugging, kissing, or bowing, are norms that are specific to particular identity groups; some groups may disagree with other groups' greeting norms or may simply have no knowledge of them. A shared identity, then could be the condition that both prescribes and activates norms, in that individuals who share identities also then share norms, and without that shared identity, the norms would not be followed.

While identities or shared group membership are the broadest type of condition on norms, they do not constitute the only conditions on norms. Especially for the question of institutional and bureaucratic reform, it is important to recognize that norms can be conditional not just upon identities but upon other specific conditions. For example, the idiom, "when in Rome... (do as the Romans do)" suggest location as the condition under which norms apply. Similarly, many Americans use chopsticks when eating in Chinese restaurants, and forks when eating similar types of food in other, non-Asian, types of restaurants. The condition here is the type of restaurant rather than the functional demands of the food. Both these examples suggest specific conditions that go beyond shared identities.

If we assume norms to be conditional, then we make explicit the challenge of identifying the conditions under which norms apply. Moreover, we are better prepared to answer the question of which norms win out, in that conditions, as well issues, partially determine which norms come into effect. For a variety of political science questions, these conditions might be identities, but they may also be other social, political, and economic conditions such as the structure of the economy or the configuration of political institutions. The role of the economy in such a model is not its effect on incentives, but its role in triggering norm-based changes; this is a critically different way of understanding the effect of the economy on political behavior. Non-identity-based conditional norms suggest a way that individuals can be highly supportive of specific behavioral changes while remaining uncritical and consistent with their past practices, because non-identity-based conditional norms do not require a fundamental change in the individual (his or her identity), but just a change in the conditions or context that that person find him or herself. Conditional norms then are blueprints for action in particular contexts, in that they provide individuals plans for what to do under certain circumstances.

### **Russia's move to the SNA**

Governance in Russia in the early 1990s was chaotic at best: the country lacked a constitution until the end of 1993; the federal executive and legislature were in constant battle; and economic production as well as state revenues were in dire straits. If we examine the experience of state institutional reform, especially bureaucratic reform, there are almost no success stories in the early 1990s. Reforms that focused on ending past practices, such as removing price controls on consumer goods, were relatively easy, and were largely successful; but developing organizational capacity is difficult. During this period, few serious attempts were made at reform, and most of these failed. In this context, the move to the SNA by Goskomstat stands out in terms of

the scope and speed of the reforms, and the conditions under which they were undertaken.

Traditionally, Soviet statistics suffered from three major methodological problems: The first was ignorance or neglect of whole areas of activity, which happened for a variety of reasons including ideology and politics. This was manifested in simply not collecting data on certain areas of the economy, or by not publishing the data, or by restricting access to the data. A second major methodological problem was the secrecy and lack of explanation of the content of indicators or categories, as well as the lack of explanation of changes to, or problems with, published data. A third problem in Soviet statistics concerned the use of Marxist or Soviet categories of analysis which had no Western equivalents and which when combined with the other methodological problems (limitations on data, secrecy about methods, and errors and manipulation) made information about the Soviet Union extremely hard to interpret, as well as difficult to compare with other countries.

Arguably the most important of these differences in Soviet categories of analysis was the lack of market prices. Because of this fundamental difference in economic systems, the statistical system used for market economies, the System of National Accounts (SNA) and its associated primary economic indicator, Gross National Product (GNP), which were based of course on prices, could not be used in the USSR. Instead, the Soviets used a system of Net Material Product (NMP) and the concept of Balance of the People's Economy (BNKh), which were based on production volumes rather than market-based prices. Both the SNA and NMP systems provided information about society and the economy to the state, however, the Soviet and international statistical systems differed in fundamental ways: The goals, foundational principles, system of classification, methods, and indicators were completely different in the two systems. Some of these differences were a function of the lack of prices in the Soviet system, but many were ideological in nature, such as the decision to only track the value of material production, excluding the value of services.

The SNA was first developed in 1953 and significantly revised in 1968 and 1993. In essence the SNA is a set of rules for collecting and processing data that aims to capture every single economic transaction (including non-monetary ones) in a given period in a country, and to link those transactions in a way that clarifies the overall structure and dynamics of country's economy (Ward 2004); it not only requires a high degree of coordination domestically but also internationally. It is a massively ambitious enterprise that builds on the earlier theoretical models of the economy and economic behavior, with the aim of "making legible" economic activity around the globe, bridging physical space as well as cultures and languages. The principle obstacles to the implementation of the SNA are the organizational resources needed to carry out the detailed, coordinated activity which defines the SNA. While communist countries largely opposed the SNA on political grounds, most countries of the world do not fully implement the SNA due to the lack of state and statistical capacity. The median response remains one in which the most basic data, such as on GDP at current and constant prices is compiled, but where more specific data on institutional sector accounts is not compiled, however many countries (48 out of 185) are not even able to compile the basic data (United Nations Statistical Commission 1999).

The beginning of the shift to the SNA in Russia dates to the late 1980s in the USSR. At that time, Goskomstat USSR had done some early estimates of GDP by rather crudely adding figures for services to Soviet indicators. But the lack of services was not the only difference between net material product and Western estimates of GDP; two other major differences were that Soviet methods counted gross output rather than value added, leading to double-counting, and when gross output volumes were converted to value indices, distant base year prices were used for older products, while new products were priced in current (higher) prices, leading to exaggeration of the value of industrial production (Kudrov 1993, 123-124).<sup>10</sup>

The first official GDP estimates were published in the 1990 statistical yearbook (which was also the last for the Soviet Union).<sup>11</sup> After the breakup of the USSR, the Russian government undertook the move to the SNA in earnest. On Oct. 23, 1992, the Supreme Soviet adopted the "The State Program for the Transition of the Russian Federation to the Internationally Accepted System of Accounts and Statistics in Accordance with the Demands of Market Economic Development," which specifically called for the establishment of the international SNA and which set a timetable for SNA progress in 1992-95.<sup>12</sup> According to former first-deputy of Goskomstat A. Zakharov, by 1993 Goskomstat had completed internationally-approved SNA estimates for 1989, 1990, and 1991. They had also estimated balance of payments (with assistance of the IMF) and had come up with a weekly retail price index, similarly approved by Western experts (Commission of the European Communities, International Monetary Fund et al. 1993). By 1996, the first phase of SNA implementation was completed and in 1997 Goskomstat embarked on a second stage that entailed full and systematic internationalization of all Goskomstat statistical information, and that process continues today. Finally, since 1996 Goskomstat has published 4 volumes of methodological notes (Goskomstat Russia 1996a, 1998, 2000, 2003) as well as extensive methodological commentary in the pages its in house journal of *Voprosy statistiki*. Such openness in explaining methods and the meaning of indicators was unprecedented in Soviet times.

This is not to suggest that all data produced by Goskomstat were unproblematic, unbiased, or complete. The attempt of Goskomstat to adapt to international standards was not without setbacks, and Goskomstat had not by any means solved all of its methodological problems. For example, Noren detailed problems during 1991-93 with inflation and price deflators, as well as problems with particular indicators including prices, national income accounting, population, labor force, employment, trade, and

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<sup>10</sup> For additional discussion of the Soviet concept of net material product see (Bergson 1991; Kudrov 1993; Noren 1994; Tabata 1996; Nesterov 1997).

<sup>11</sup> Noren called these perestroika era attempts at GDP "half-hearted" and "feeble at best" (Noren 1994, 14). However, the publication of GDP was nonetheless a watershed event; and the people working on GDP at the time were at the forefront of serious institutional change in Goskomstat.

<sup>12</sup> "Postanovlenie Verkhovnogo Soveta Rossiiskoi Federatsii: O Gosudarstvennoi Programme perekhoda Rossiiskoi Federatsii na priniatiu v mezhdunarodnoi praktike sistemu ucheta i statistiki v sootvetstvi s trebovaniiami razvitiia rynochnoi ekonomiki," *Rossiiskaia gazeta*, no. 242, 6 Nov. 1992, p. 4. This document was also published in English as "The National Program of the Transition of the Russian Federation to the Internationally Accepted System of Record-keeping and Statistics According to the Demands of Market Economic Development," *International Statistical Institute Occasional Paper*, Series #2, 1993, pp. 8-33. For details on the contents of the program see (Guzhvin 1993, 7-8; Noren 1994, 32-35) and *Vestnik Statistiki* issues during the fall of 1992 and winter 1993.

finance (Noren 1994, 26-29). His overall assessment was that FSU statistics for production, consumption, and foreign trade were understated (Noren 1994, 31). Tabata also, in a very detailed analysis of SNA data for the 1989-95, period reported that there remained a scarcity of data on SNA. And he also noted the continued existence of the old problem of frequent changes (published later without comment) to previously published figures (Tabata 1996, 130).

Another curious issue at Goskomstat is that in the midst of such radical reorganization of economic statistics, there has been relatively little change in demographic statistics. The census, which is the primary event for national demographic statistics, was delayed for three years due to a lack of funding. And, while there were some notable changes in a few questions on the census, in general the way in which the census was conducted, especially on the issue of compromised integrity of data, there was little change from the Soviet period (Herrera 2004a). Moreover, Goskomstat, as well as many other demographic researchers in Russia, remain committed to "quota-based" rather than "probability-based" survey methods. This means that many more people are surveyed, than are necessary from a statistical point of view, which further squeezes limited resources. The experience of the 2002 census and demographic data makes an important point about reform at Goskomstat, namely, that it was primarily confined to the SNA, and this despite the fact that it is one centralized organization and the same people work in both areas (economic and demographic data).

In summary, the SNA is a complicated and expensive institutional reform, and many countries of the world still struggle with its implementation, more than 50 years after its development. However in Russia, despite the failure of most state institutional reforms, and the lack of history and experience with the SNA, Goskomstat moved relatively quickly and successfully towards implementation. While the work is ongoing, even critics of Goskomstat would acknowledge that the SNA achievements to date are impressive and that the organization of current Russian economic statistics has fundamentally improved over the Soviet period. And yet, it is only in economic statistics and the SNA, rather than across the board at Goskomstat where there has been significant bureaucratic reform. Below, I revisit the theories discussed above in order to explain these puzzles.

### ***Interests and organizational structure:***

Goskomstat is a centralized and closed bureaucracy. In Soviet times, the organization had minimal contact with the public via its publications, and to the extent there was, it was a one-way relationship where Goskomstat published statistical material, some fraction of which was available to the general public, and where Goskomstat did not debate, discuss, or get feedback from the public. Nevertheless, even during Soviet times there was some awareness of the gap between Soviet methodological training and reality. For example, even without debate an observer could easily figure out that it was impossible for bread consumption to be greater than production, since bread was something that was not imported. Similarly, economists and statisticians could ask themselves whether it made sense to focus exclusively on "material" production, totally ignoring services in national accounts. Or whether it was

sensible from a statistical point of view to ignore a range of politically sensitive topics such as unemployment.

During perestroika, there was a marked increase in the consideration of alternative economic and statistical systems. For example, the current head of Goskomstat, Vladimir Sokolin, told me that during Perestroika a fellow economist had given him a copy of Samuelson's economic textbook, which he read from cover to cover, at night, with a dictionary (Sokolin 2004). But the SNA was not a foreign concept for Soviet statisticians; indeed they helped craft the initial 1968 edition at the UN. Andrei Kosarev who headed the department for national accounts at Goskomstat during 1994-1998, and who also directed the Center for Economic Analysis which conducted some of the first independent estimates of SNA for 1990-1994, told me that his knowledge of the SNA came primarily from two sources: Soviet economists Iurii Ivanov and Boris Asaev (Kosarev 2004). Ivanov had worked at the UN for 11 years on the development of SNA, but had also worked at the same time in Goskomstat USSR in the department of national accounts. Interestingly, far from being a new discovery in the late 1980s, the SNA turns out to have been a concept that Soviet statisticians knew about, but rejected as appropriate only for capitalist, price-based economies.

However, perestroika and glasnost' allowed for greater official experimentation with different methods. Dissident republican statistical committees, such as in the Baltic states, took the initiative to publish their own economic data, including estimates of GDP, sometimes in the local languages, which were not based on a standard Soviet methodology (Nesterov 1997, 1472-1474). These alternatives and de facto criticisms of the central statistical authorities compelled, or at a minimum helped to motivate the central Goskomstat to take action in the form of reconsidering rules and formulating a central plan for early estimates of GDP.<sup>13</sup> And, by 1989 Goskomstat USSR had produced a set of guidelines for republican statistical offices in constructing republican national wealth estimates. From a historical point of view, these were extraordinary steps.

The wide-ranging demands under glasnost' for more openness and discussion of politics, economics, and society extended to public discussion of state statistics. During this time access to state statistics was also greatly widened. In accordance with resolution 822, an information-publication center (*Informatsionno-izdatel'skii tsentr*) was created. This center was one of the first open points of access for foreigners as well as ordinary citizens to Goskomstat data.<sup>14</sup> Unlike in the past, in newspapers and journals Goskomstat was subject to scathing criticism. For example unorthodox economists such as Gregorii Khanin called attention to the need for change at Goskomstat and Soviet statistics more generally in articles in *Novyi Mir* and *Kommunist*.<sup>15</sup> And, Goskomstat was forced to respond to criticisms, because it was no longer possible after 1987 to either suppress or ignore them. When I asked Chairman Sokolin if Goskomstat had been influenced by any of the criticism of the organization in academic journals or

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<sup>13</sup> For further discussion of this point see (Heleniak and Motivans 1991, 479-480).

<sup>14</sup> To date, the center retains the same name and it is the current site of the Goskomstat store where publications are on sale, and it is the only part of the Goskomstat building open to the public without a special permit (*propusk*).

<sup>15</sup> See (Seliunin and Khanin 1987; Khanin 1988). While Khanin's work is well known, there are few economists today who agree him. Nearly everyone however agrees that his articles in the late 1980s were influential.

the popular press in the late 1980s and early 1990s, he said that he disagreed with a lot of the criticism but that it had an impact. He said, "If someone is constantly telling you that your make-up makes you look ten years older, whether you agree or not with that person, eventually you're going to go look in the mirror" (Sokolin 2004).

Goskomstat's relations with foreign organizations visibly changed at this time as well. For example, in 1987 the US Bureau of the Census and Goskomstat began a program of cooperation that included exchanges of official delegations, methodological information, and publications (Heleniak and Motivans 1991, 123-124). This type of foreign interaction grew in terms of frequency and scope throughout the late 1980s. In May 1989 Goskomstat began a telecommunication link with the UN Economic Commission for Europe's network (ECESTATNET) (Heleniak and Motivans 1991, 479). And by 1990, international institutions, including the IMF, World Bank, OECD, and EBRD were also making inroads into the methodological debates in Goskomstat (Belkin 1992, 102).

Concomitant with the fracturing of the Soviet Union into independent states in 1991, the State Statistical Committee of the USSR was also broken up into its constituent parts. Goskomstat Russia inherited the core of the organization, but a new CIS level organization was also created. The Statistical Committee of the Commonwealth of Independent States (*Statisticheskii Komitet Sodruzhestva Nezavisimykh Gosudarstv* – Statkom CIS) was established in 1992, with former Goskomstat chairman, M.A. Korolev as its chairman (Noren 1994, 13-37). Statkom CIS was created mainly to work on the development of the SNA and the implementation of international methodology for all CIS countries.<sup>16</sup> The vice-chairman of Statkom is Iurii Ivanov, who was one of the strongest advocates for the move to the SNA in the USSR.

The new Russian state in the early 1990s led by President Boris Yeltsin generally, and more specifically Prime Minister Egor Gaidar's government, was committed to moving Russia towards a market economy, and in particular to introducing market prices. This government was also in favor of institutional and methodological reform at Goskomstat. The government did not directly intervene in the implementation of the SNA or other institutional reforms at Goskomstat, but the type of information that the Gaidar government asked of Goskomstat was in accordance with the move to the SNA. For example, in 1992 after introducing prices, the new Russian government asked Goskomstat for a variety of new indicators, such as on inflation, which previously had not been done. These kinds of informational demands from the government that were consistent with the SNA but not the Soviet system of statistics continued even after the Gaidar was out of power.

As of 1993 Goskomstat had joined as a member the UN Statistical Commission and the Confederation of European Statistics (Guzhvin 1993, 12). And at the same time Goskomstat was also already submitting data regularly to the IMF, EBRD, and other international organizations. Even by 1994, Goskomstat was a very different organization than it had been in 1991. For example, Koen reported on the change in his interactions with Goskomstat over the 1990s, noting that the organization was increasingly much more open to discussion with foreigners (Koen 1996, 321). The same types of positive

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<sup>16</sup> For discussion of Statkom CIS's early activities, see (Noren 1994, 31-32). The original documents are published in "Informatsionnii biulleten'," *Statkomiteta SNG*, 1:1, 1992, p. 13-20 and "Informatsionnii biulleten'," *Statkomiteta SNG*, 1:4, 1993, p. 5.

assessments of foreign contact were confirmed by other scholars, including those from the World Bank who at times were in weekly or even daily contact with their Goskomstat counterparts.

Another aspect of Goskomstat's relationship with international organizations in the 1990s was that Goskomstat collected and processed data *together* in cooperation with the demands of international standards, rather than just presenting data as finished products to international organizations. These included a range of international and foreign organizations, such as the UN, World Bank, IMF, EBRD, Eurostat, and state statistical agencies of the USA, Germany, France, Italy, and the Netherlands ("O sostoianii informatsionno-statisticheskoi bazy po sotsial'no-demograficheskim kharakteristikam naseleniia" 2001; Trembl 2001, 21; Vlasov 2001). The most significant example was the "Report on National Accounts," based on the 1993 UN SNA, published jointly by Goskomstat and the World Bank (Goskomstat Rossii and World Bank 1995).

Within Goskomstat Russia itself, the leadership as well as lower level employees seemed to be remarkably strongly in favor of the move to the SNA, especially after the introduction of prices at the beginning of 1992. This assessment is based on interviews with Goskomstat officials in Moscow as well as in 11 regions of Russia, conducted between 2003-2004 (Herrera 2004b), and also on the basis of content analysis of Goskomstat's in-house journal, *Vestnik statistiki* (since 1994 called *Voprosy statistiki*) (Herrera 2005b). Interestingly, the leadership of Goskomstat has changed several times since 1991 (including in 1998 when the director of Goskomstat was arrested), but the commitment of Goskomstat in moving to the SNA continued despite these leadership changes.

The focus on the interests of actors involved both directly and indirectly in the reform process and the organizational structure at Goskomstat, settles some issues in the explanation of bureaucratic reform, but raises some important other ones. First, during the critical period of reform in the 1990s the centralized nature of the organization helped diffuse technical assistance and expertise. Information about statistical systems, both the Soviet system, and later, the SNA, filtered down through the organization via a range of mechanisms including nationwide conferences dedicated to retraining as well as educational materials that were distributed to regional offices. Thus, the relatively closed organizational structure played a positive role in the implementation of the reform, once the decision was undertaken.

Second, there was a remarkable level of consensus on the need to shift to the SNA in the 1990s by all of the key actors, namely: Goskomstat employees, both the leadership and rank and file; the Russian government; societal critics; other statistical agencies within the former Soviet Union; and international organizations. The state, especially the Gaidar government was clearly interested in the move to the SNA in the early 1990s. Moreover, societal actors in Russia, international organizations, and related regional statistical organizations also strongly favored the reform. But, the government and international organizations had very little ability to enforce their will upon Goskomstat, and indeed could not do so in many cases. Similarly, while societal actors were supportive of change within Goskomstat, the organization was so closed that outside actors hardly had a definitive role in the process. Thus, state, societal, and international interests were supportive of reform, but they were not able to directly force change within Goskomstat.

If we shift our focus to the employees of Goskomstat Russia, we see that there too, the actors charged with reform were very much interested in the SNA, and these are precisely the actors who were directly able to implement change. But this surprising agreement on reform interests brings up the question of why these actors, especially those at Goskomstat who had previously supported a Soviet alternative to the SNA, came to be so committed the SNA – in other words, where did this interest in reform come from? Actor-centered theories are a step towards explaining bureaucratic reform, but they present an incomplete story: Knowing what the interests at the time of reform were, we have to ask what are the sources of these interests or what is it that motivated bureaucrats at Goskomstat to embark on such a radical departure from their past work.

### ***Economic conditions and incentives***

Global or domestic economic conditions can affect bureaucratic reform in two ways: they can determine the level of resources available to an organization that can be used to implement reform; and they can affect incentives for and against reform. The change to the SNA took place in tandem with the move to a market economy in Russia, and the collapse of Soviet communism as an alternative to capitalism in most parts the world. One might argue that increasing globalization and diffusion of capitalism as an economic system made the shift to the SNA inevitable because Soviet statistical methods had become archaic and untenable in the post-Soviet Union global economy. Moreover, one could argue that the SNA was simply more efficient than the old Soviet statistical system and would lead to greater long-term economic benefits for Russia as a whole. However, it would be a mistake to infer that because the SNA is economically more efficient than the Soviet statistical system that the reason Goskomstat employees favored reform was on efficiency grounds.

The economic rewards for moving to the SNA were, at best, quite indirect. During the most intensive period of statistical reform at Goskomstat, 1992-1996, the Russian economy registered substantially negative growth rates. Moreover, there were many types of other institutional reforms, including the development of rule of law or the eradication of corruption, which would have been efficiency-enhancing, but which were not undertaken; and thus it's not clear why the efficiency argument would apply to reform at Goskomstat only. Thus, it does not seem plausible that the long-term economic benefits for the country as a whole could explain the SNA reform. But even if we accept that there were significant macro-incentives to join the SNA, the SNA is massive institutional project, and the 7-point scale of level of completeness reflects a lot of variation around the world. International pressure might explain the decision to sign on to the SNA, but cannot explain the level of achievement; that is why should Russia not have remained at 0 or 1 like so many of countries around the world. Finally, pressure from the government, other countries or international organizations that was concentrated at the top of the organization does not explain the widespread support for the SNA throughout the organizational levels of Goskomstat.

If we consider the economic resource allocation inside Goskomstat, the conditions for reform seem even less promising. At the time of the SNA reforms, Goskomstat was a poor organization, situated in a dramatically impoverished state. The budget of Goskomstat came primarily from the Russian state, and it was subject to reductions due to both to budget cuts as well as the extraordinary inflation of the early



1990s. The most significant source of extra-budgetary funds was a loan from the World Bank. However, these funds were rather limited and went primarily to the central Goskomstat office in Moscow for equipment (mainly computers) or to pay for technical assistance from Western consultants; they did not result in additional salary or bonuses for lower level Goskomstat employees. The other source of income for the organization was publication sales; while there are no reliable quantitative sources available on the size of revenue from publication sales, the funds are usually deposited directly into the federal budget (though purchases at state banks) and there is no evidence that these sales constitute a significant portion of the organization's budget. Thus, despite the World Bank loan and the ability to sell publications, like most other state institutions in Russia, Goskomstat was terribly resource constrained in the 1990s.

The tight budgetary constraints of Goskomstat also had an effect on incentives within the organization. There were basically no positive incentives (carrots) in the form of raises, bonuses, or perks for increased productivity or completion of reforms. Employees were paid very little, but at least, unlike some other state institutions and enterprises, Goskomstat did not have a non-payments problem – although it was *all* they received, the staff did consistently receive salaries during the 1990s. The salaries of employees with university or institute degrees were approximately \$50 per month, and there were no funds for other expenses such as renovation of offices or equipment.<sup>17</sup> Interestingly, the lack of a non-payments problems seems to reduce the incentives for reform even more; if you know you will be paid no matter what, then why work at all, or to the extent that one does work, why work harder learning something new? At such low wages, one would have expected workers to do the minimum necessary, rather than to work harder. Thus, it seems unlikely that the employees of Goskomstat were motivated to reform by positive financial gains.

Another aspect of the serious lack of resources at Goskomstat, however, was the real existence of negative incentives (sticks), and these were mainly manifested in job losses. Financial constraints restricted the number of employees as Goskomstat was forced to reduce its workforce by approximately 50% during the 1990s.<sup>18</sup> This hard employment constraint provided incentives for elimination of redundant and less skilled workers, and retention of the best workers. But it also limited contestation of the normative environment; those who disagreed with the leadership's program for reform were more likely to be fired.

The role of economic resources and incentives on reform at Goskomstat is complicated. First, although macro-economic incentives favored reform, the mechanisms by which those incentives to the country as a whole translated into bureaucratic action are not clear. Second, implementation of the reforms was hampered by the lack of facilitating resources that would have allowed for the acquisition of equipment and supplies and hiring more skilled personnel. Third, the lack

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<sup>17</sup> Even in 2004, after several efforts under President Vladimir Putin to increase the wages of state civil servants, the wages at Goskomstat for university graduates are around \$100 per month for employees in the regions, and about \$200 per month for those in Moscow.

<sup>18</sup> True, some of these reductions were due to the splintering of USSR organizations into various units. And, sometimes people were rehired into other organizations. But, even if the official figures are off a substantial margin, that still is a significant cut in staff. In addition, the official figures are supported by regional interviews in 2004 where all offices reported at least half of the number of employees as had been the case during Soviet times.

of resources for positive incentives to compel employees to work harder on reform would seem to have hindered reform. But, fourth, the limited economic resources of Goskomstat decreased the number of employees during the period of reform, reducing the number of employees opposed to reform.

Overall, the economic conditions and the incentives generated by those conditions do not provide a satisfactory explanation of the SNA reform: the first three points would predict the reform never should have occurred, and the fourth point, while suggestive of one mechanism whereby employees opposed to reform are removed, still does not explain the reasons why those employees who did continue to work for Goskomstat were positively inclined towards reform. That is, we are left with the same question as in the discussion of actor-centered theories, namely among those Goskomstat employees who actually implemented the reforms, where did the interest in moving away from the Soviet system and towards the international SNA come from?

### ***Norms and organizational identities:***

Organizational identities provide insight into the way in which bureaucrats understand the world, and can shed light on the practices as well as future goals of group members. Goskomstat employees, by and large, shared a Soviet bureaucratic identity, but they also were part of an imagined community of international statisticians. These conflicting identities have largely remained intact, even after the end of the USSR, although the Soviet identity today is somewhat weaker and the relationship to the international community of statisticians has become more real than imagined in the post-Soviet period owing to increased real engagement with other statisticians around the world.

The Soviet bureaucratic identity is marked by a commitment to the Soviet system, which itself embraces a particular type of modernity including reverence for science and ever-increasing state legibility of the details of human activity, but also a commitment to hierarchical lines of authority and secrecy, rather than liberalism and transparency. There is little question that employees at Goskomstat shared this Soviet identity: their publications over several decades as well as their documented interactions with outsiders testify to this (Herrera 2005a). In addition, I argue that this identity did not change all that much, even after the end of the USSR, and, amazingly enough, even after the implementation of the SNA.

For example, in 1996 Goskomstat Russia published an auto-history, titled *Russian State Statistics, 1802-1996* (Goskomstat Russia 1996b). This book is essentially a list of Russian and Soviet achievements in statistics. There is not a single critical word about the Soviet period. Had the book been published in 1980, it would simply have been an unremarkable addition to the hundreds of self-congratulatory articles in the Goskomstat publication record. But it was published in 1996, in the midst of completing the first phase of transition to the SNA, which was a seeming renunciation of the Soviet statistical system. The book is also consistent with the fact that no matter how far Goskomstat has departed from past Soviet practices regarding national accounts, it has never issued an apology or even a set of corrections for past Soviet work. The 1996 book, as well as the record in *Voprosy statistiki*, Goskomstat's in-house journal, puts to rest the notion that Goskomstat employees were not actually invested in the Soviet system or that they were secretly anti-Soviet all along (Herrera 2005b).

In addition to the Soviet identity, however, Goskomstat employees shared another identity, that is, of the community of international statisticians. As fellow scientists, Goskomstat employees considered themselves to be members of this professional group. Soviet statisticians regularly met with other statisticians in Eastern Europe through the Council for Mutual Economic Assistance (Comecon), and, for much of the 20th century, as statistics was developing as a science, and the SNA was in formation, Soviet (and East European) statisticians were active members in the international community, especially at the UN. Soviet contributions were real and Soviet statisticians were taken seriously by international actors, especially before World War II. But as the hegemony of the SNA grew during the Cold War, and as the promise of the Soviet economic system as a whole grew dimmer, the Soviet alternative to the SNA became less well regarded internationally, despite the continued commitment to it by Soviet statisticians.

Organizational identity change may come from the content of particular identities changing over time, or from changing the individuals who comprise the organization. As I have argued above, the content of Goskomstat's organizational identity, though somewhat in conflict, did not change dramatically over time. In addition, aside from losing over half its workforce, there was no major personnel replacement at Goskomstat during the 1990s, because here were very few new employees hired during the period. The main reason for this was not because Goskomstat did not need young highly skilled employees in order to implement the SNA; rather it was because for a variety of reasons it was very hard to attract employees.

Relative to other state institutions that required technical and statistical skills, such as the Ministry of Finance or Central Bank, Goskomstat offered much lower prestige as well as pay, and therefore had greater difficulty in attracting or keeping skilled workers. In addition, the private sector paid several times the salaries of state institutions. And, international institutions that worked with Goskomstat (as well as the Ministry of Finance or Central Bank) were another source of "brain drain" for Goskomstat's most talented staff. An indicator of the level of prestige and employee compensation at Goskomstat is apparent in the gender breakdown: Goskomstat is overwhelmingly – approximately 90% – staffed by women, except of course in the highest management positions, which are overwhelmingly men.<sup>19</sup> The average age of employees at Goskomstat is currently about 43, and each year this average is going up. The organization still today relies mainly on people who began working there in the 1980s; but in the late 1980s and early 1990s it had many more people who had worked there even longer.

In summary, the content of organizational identity at Goskomstat was marked by two primary allegiances: to the Soviet system and to the international community of statisticians. These loyalties were somewhat in conflict: the international community of statisticians was committed, increasingly over time to the SNA, and in many ways the SNA was antithetical to the Soviet bureaucratic identity because the SNA called for

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<sup>19</sup> These figures are the author's own estimates. It should also be noted that gender breakdown as a signal of prestige and compensation is not limited to Russia. It is generally true that occupational categories which are primarily staffed by women have lower pay and prestige. Of course this is not a signal of the lower qualifications of women or the true value of the work, rather it is a reflection of societal attitudes that devalue, or value at lower rates, work done by women.

transparent coordinated practices that did not serve the interests of certain governments, in particular, that of the USSR. In the post-Soviet period, Goskomstat's organizational identity has shifted somewhat towards the international community, but much of that shift *followed* the move to the SNA, it did not precede it. Thus, an identity shift, to the extent there has been one, does not answer the question of why Soviet bureaucrats would so enthusiastically embrace the SNA in the early 1990s.

### *Conditional norms at Goskomstat*

For Goskomstat employees and Soviet statisticians in general, one way of reconciling the conflict between Soviet bureaucratic and international statistician identities was to delineate the conditions under which the SNA should be used. That is, rather than linking the SNA to an identity per se, or accepting that members of a given group, Soviet statisticians versus statisticians from other countries, should advocate a particular statistical system, the SNA was linked to the structure of the economy.

Making the use of the SNA conditional upon the economy, rather than upon professional organizational identities, seemed reasonable on several grounds. First, the SNA was fundamentally based on market values and therefore premised upon the existence of prices. The Soviet system, however lacked market prices, and therefore could not accommodate the requirements of the SNA. Thus there was in fact a structural incompatibility between the SNA and the Soviet economy. The reaction of most Western economists, especially in the latter half of the 20th century, was that the Soviet Union should both introduce market prices (rather than having prices set by the government) and move to the SNA; this would create the kind of economic transparency that international statisticians valued. The response of Soviet statisticians however, was to argue that the SNA was indeed appropriate for a specific type of economic system, i.e. a capitalist, price-based system, but that the Soviet system required a different statistical system. For Marxists this argument, that a country's underlying economic structure should be determinative of other institutions, was hardly a stretch. In addition, this delineation of spheres of appropriateness for the SNA also solved a second problem, which is that it went a long ways towards reconciling the conflict between Soviet and international identities for Goskomstat employees; by agreeing that the SNA should be used in capitalist countries, but that the Soviet system was appropriate for socialist countries, Goskomstat statisticians could be both Soviet and international at the same time. This demarcation of circumstances in which SNA was appropriate was in effect the creation of a conditional norm; that is, it specified the conditions under which the norm applied.

In Table 1, I have summarized the norms that have structured the attitudes towards statistical work among Goskomstat employees, i.e. those actors responsible for the move to the SNA in Russia. In the first column, I have noted the identity group for which the norm was meaningful, that is, the actors who held the norm and the specific time and place in which they were located. In the second column I summarized the content of the norm, or the set of appropriate actions. In the third and fourth columns, I highlighted the conditional properties and consequences of the norms, by noting the specific conditions that bring them into effect, and the consequence which follow from such conditions.

[Table 1 about here]

The first norm in Table 1 concerns the SNA itself. The SNA is an ongoing highly institutionalized project that regularly brings together statisticians and government officials from a variety of countries on a constant basis. Over time consensus grew among statisticians worldwide that the SNA is the only appropriate system for national statistics. This consensus has reached near hegemonic status at the present time. SNA is not only high status; it has the status of objectivity. The SNA is therefore a massive blueprint for action that commands tremendous scientific and political legitimacy. There is of course contestation over this norm; the changes in versions of the SNA over time are indicative of contestation. However, the debates are now about particular indicators, rather than the System itself, which was not the case in the past, and not the case before the end of the Soviet statistical system. This SNA norm is conditional only in the broadest sense, that is, upon an identity, namely membership in the shared community of international statisticians.

The second norm in Table 1 summarizes the Soviet norm of different statistical systems for different types of economies; in other words, the Net Material Product system was appropriate for the Soviet planned economy, but the System of National Accounts was appropriate for market economies. The type of economy was the condition that determined the type of statistical system. This conditional norm allowed Soviet and Russian statisticians to make sense of the two statistical systems without having to rank them against each other. Soviet statisticians could then actively participate in UN work on the SNA and come to see the SNA as the only legitimate system for market economies, while simultaneously continuing their commitment to the NMP in the USSR and other planned economies, thus reconciling their two professional identities.

A corollary to this Soviet norm is that as economic systems change, so too should the statistical systems change. In other words, if the economy of Russia changes from a planned economy to a price-based economy, then the statistical system should change from the Soviet system to the SNA. Thus, the introduction of prices meant the end of the legitimating condition for the Soviet statistical system. Another way to conceptualize this norm is that in the post-Communist era, that is the post-planned economy vs. market economy era, there was no longer any need for different statistical systems. As economies became similar, so should statistical systems, and thus norm of international commensurability across all statistical systems – i.e. the SNA – is appropriate for a post-communist world.

The international context and in particular the end of the cold war and the related decline in the ideological power of the Soviet system played a role in the normative environment at Goskomstat, and the attitudes of personnel towards international standards and methods. Whereas the autarkic Soviet system had provided some justification for methods which were consistent with Marxist ideology and specific to the needs of central planning – e.g. including only material production rather than services in national income estimates, and using state defined prices to derive values – the end of that system and the triumph of capitalism, including the de facto creation of a market economy in Russia by the introduction of prices on January 1, 1992, triggered the

conditions for change to the SNA for Russian statisticians, in that the previous conditions which legitimated a separate soviet system no longer existed.

These SNA norms were evident in every level of Goskomstat as an organization. For example, former Goskomstat Chairman Pavel Guzhvin ended his 1993 article with a very familiar sentiment, "... we hope to raise statistics to a level that will satisfy the demands of the market economy and will make it possible to compare indicators of the Russian national economy's development with analogous indicators of other countries" (Guzhvin 1993, 13). In addition, in interviews with lower level regional Goskomstat personnel, in response to the question of why there had been so much change in methodology at Goskomstat, respondents almost universally noted that the new conditions of the market economy demanded change and it was important for Russian statistics to be comparable with other countries (Herrera 2004b).

An extremely important part of the explanation of the shift to the SNA in Russia was that the SNA was never considered to be a new concept or a foreign imposition. Far from being new information, which was transmitted to Russian statisticians from their Western counterparts in 1991, Soviet and Russian statisticians, were long familiar with the SNA and had participated in its development at the UN. Many Soviet statisticians and mathematicians were aware of both the contributions of their compatriots to the science of statistics as well as to the development of the SNA. This meant that by the time the economy changed in Russia, Soviet statisticians were already familiar with and aware of an alternative statistical system, upon which there was widespread international consensus.

This is not to suggest, however, that international actors and knowledge networks were not vital for Goskomstat during the transition to SNA.<sup>20</sup> When glasnost' came to the Goskomstat beginning in 1987, Soviet statisticians engaged in serious debate with outsiders and began contemplating changes in their methodology. International organizations including the UN Statistical Commission, Eurostat, the IMF, and the World Bank in particular were absolutely critical to the shift to the SNA.<sup>21</sup> However interest in the SNA at Goskomstat occurred largely before the close collaboration with international organizations began. Thus the implementation of the SNA was greatly aided by international assistance, but the decision to move to SNA was taken in advance of this assistance.

The Bockman and Eyal model seems quite appropriate here in that in contrast to the unidirectional diffusion model, the interactive joint collaboration that Bockman and Eyal describe is a more accurate description of Russian participation in the international discussions on the SNA (Bockman and Eyal 2002). There was hardly any need for foreigners or international organizations to convince Russian statisticians of the usefulness or appropriateness of the SNA as a statistical system for market economies;

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<sup>20</sup> For example, in working on the transition to SNA, Misha Belkindas of the World Bank met regularly or talked on the phone weekly with the Chairman of Goskomstat.

<sup>21</sup> Ironically, for all their efforts in deciphering Soviet statistics, established Sovietologically oriented organizations such as the CIA played little role, if any, in the transformation of Goskomstat in the 1990s (that is, beyond the data and analysis they had provided previous to the end of the Soviet Union). CIA work on Soviet statistics stopped completely in 1991, and in any case their methods were no longer relevant. Whereas CIA analysts poured over published material from afar with almost no direct contact with Goskomstat, analysts from international organizations worked from inside Goskomstat with the direct cooperation of Goskomstat's top leadership.

Russians were aware of this "fit" given the norm about the relationship of statistical systems to economic systems. It was this norm that allowed Russian actors to both value the past Soviet system, and commit wholeheartedly to switching to a totally different system, the SNA, as soon as the economy changed.

In summary, I argue that ultimately the norm of matching the statistical system to the economic system provided guidance to actors in Russia and is what created the interest, under specific conditions, in institutional reform. While organizational identities are crucial for illuminating which professional norms are applicable in a bureaucracy, in this case, bureaucratic reform was not a function of a change in identities themselves, but rather a function of the logic of norms which were important to the reconciliation of conflicting identities. The conditional norm that delineated the spheres of appropriateness of the SNA, and the change in economic conditions, were what triggered the interest in the shift to the SNA among Goskomstat employees. Ironically, the same norm that made it possible for Goskomstat statisticians to reconcile their use of the Soviet statistical system with their commitment to international statistical standards turned out to be a recipe for change, in the unlikely case of a change in the economic system. But the widespread support for the SNA in the early 1990s would not have been possible without the previous institutionalization of norms regarding international statistics over the 20<sup>th</sup> century. Thus, the conditional norm about the relationship between the economic and statistical systems worked in concert with existing professional and international norms for national statistics.

These conditional norms regarding the SNA also shed light on another puzzle at Goskomstat, namely that there has been radical change in economic statistics, but very little change in demographic statistics, and in particular there was little change in the 2002 census from the past Soviet ones. There was no such norm linking the type of census to a specific type of statistical system. Soviet censuses did not differ dramatically from international practice in terms of their categorization of content, and there is not an equivalent to the SNA internationally for censuses. The primary problem with Soviet censuses has been in the manipulation and scarce publication of data and other issues regarding a lack of transparency (Herrera 2004a). For these issues there were neither legitimating norms for the Soviet period, nor conditions under which practices should change.

### **Observable implications**

My argument about bureaucratic reform at Goskomstat locates the primary source of reform interest in conditional norms that date from the Soviet era. Due to this Soviet legacy, if my theory is correct, one observable implication would be that it should predict organizational behavior related to the SNA for other former Soviet states and Eastern European countries or members of the Council for Mutual Economic Assistance (Comecon). These states, many of whom were under the influence of the Soviet statistics as well as the Soviet economic system, should have, like Russia, advanced relatively quickly in implementing the SNA reforms after the change to market-oriented economies. Comecon in particular is an interesting test because it includes those countries most closely allied economically with the USSR, and those which therefore were likely to have shared most closely ideas about the organization of the economy and statistics.

Indeed, if we first look at the ranking of all regions of the world in terms of progress on the 1993 SNA (United Nations Statistical Commission 1999), see Figure 1, we see that FSU states do very well – and this is despite not having had previous experience with the SNA.

[Figure 1 about here]

As a region, the FSU states have the third highest average SNA score (2.13) behind Western Europe and North America, and the region is above the world average (1.60). This is remarkable given that FSU states had only begun implementation of the SNA less than ten years before these rankings. In addition, in general the FSU region does not tend to do well on indices of institutional reform, and FSU states rarely, if ever, outperform Eastern European states in terms of institutional reforms. Moreover the average for the 24 Comecon member states (including those that were members as of 1987, excluding East Germany) was 2.00, making it slightly below the FSU regional average and ahead of all other regions of the world, save North American and Western Europe.

The regional distribution in Figure 1 also very clearly suggests that wealth matters for implementation of the SNA. The two regions that do best overall are also the wealthiest regions of the world. To probe these relationships further, I used OLS to examine the relationship between wealth, regional status, and SNA achievement level. As it turns out, even controlling for wealth, status as an FSU, Comecon, or East European state has a positive and significant effect on SNA achievement. Table 2 shows the results of three models predicting SNA achievement.

[Table 2 about here]

Model 1 considers the effect of being in the FSU, controlling for wealth, measured as GDP per capita, on SNA achievement; model 2 considers the effect of being either an FSU or East European state, and model 3 considers the effect of having been a Comecon member state. In all three models, GDP per capita is significant, but so is regional status. The effect is strongest for FSU status, followed by Comecon status, and then FSU and East European status combined.

If we then consider linear predicted values of SNA achievement given increasing levels of GDP per capita, the difference between FSU, Comecon, and East European countries versus other countries of the world is even starker.

[Figure 2 about here]

Figure 2 shows that for most countries of the world, the relationship between per capita GDP and SNA achievement is very straightforward; as countries' GDP per capita increases, the more likely they are to have achieved a higher level of implementation of the SNA. However, for FSU and Comecon countries, the slope is much steeper. In other words, FSU and Comecon countries are able to do more with less: they are likely to be able to achieve a higher level of implementation of the SNA at lower level of wealth.



These findings regarding the experience of other countries of the world with the SNA support my theory of conditional Soviet norms as being important for reform. In other countries that shared a Soviet economic and statistical legacy, the experience seems to be similar to Russia's: given low levels of wealth, there was a higher than expected level of SNA reform. Although further analysis would need to be done to demonstrate that the same norm-based causal mechanism is actually at work in other FSU or Comecon countries, the correlation of FSU and Comecon status with high SNA achievement suggests that the shared legacy is important. In this way, the norms-based explanation for reform in the Russian case is probably not restricted only to Russia.

## **Conclusion**

The implementation of the System of National Accounts represents a state institutional reform that requires complex bureaucratic reform. Bureaucrats, not only have to the skills and resources to carry out reform, but they also have to have the motivation to do so. The case of implementation of the SNA in Russia in the 1990s presented a puzzle that could not be answered by an examination of actors, incentives, and economic conditions alone. Theories which focus on the specific constellation of actors and their interests, in particular organizational contexts are instructive insofar as they lead us to examination of the inter-workings of Goskomstat and the interests of its employees; but such theories do not identify the source of interest in reform. Societal interests outside Goskomstat had only minimal influence on the organization, and although there was some international pressure to implement the SNA, that outside leverage cannot explain why Russia did more than was necessary to meet the median international level of implementation. Economic theories that focus on the incentives generated by economic conditions at particular periods in time, also do not account for the interest in reform. Economic incentives for the implementation of the SNA among the relevant actors was diffuse and long-term at best; it is true that Russia as a whole is better off with the SNA, but it was bureaucrats who had little to gain economically from the reform who implemented the reforms. To the extent that interest maximization was going on at all, the movement to SNA reflects maximization of professional legitimacy rather than economic efficiency.

In contrast to these theories, I have argued that conditional norms which linked the type of statistical system to the structure of the economy played a crucial role in explaining the motivation of bureaucrats within in Russia for reform. For actors within Goskomstat, the three related conditional norms – namely that the SNA is the only appropriate statistical system for market economies; that statistical systems should correspond to the particularities of economic systems; and that as economies change, so should statistical systems – were crucial in bureaucrats' decisions to support the move to the SNA. These norms, in the context of structural economic changes, explain the bureaucratic zeal for rapid implementation of the System of National Accounts in Russia in the 1990s.

While several types of variables may be important for bureaucratic reform, it is useful to clarify which variables were actually at work in this case. The actors in this case did not change; there were few newcomers to the organization and the reforms were not the result of the capture of the organization by reformers. Interests at the

organization, however, did change, and this change in interest by the same actors constituted the primary puzzle of the reform. Economic conditions did change in two ways: The economy itself went from bad to worse, severely limiting the resources available for reform, and hence hindering reform to some degree. But, Russia also underwent marketization in the sense of rapidly (almost on one day, January 1, 1992) moving from a centrally-planned to a price-based economy; thus, there was a very significant change in the structure of the economy, even though this structural change did not generate significant economic incentives for reform. Organizational identities were important for reform at Goskomstat, but not because the identities changed over time, but because Soviet and Russian statisticians were conflicted in that they longed to be both part of the international community of statisticians, while also striving to support the Soviet system. This conflict of identities, and the norms associated with them, was resolved for several decades by the conditional norm that delineated spheres of appropriateness for different types of statistical systems. But when the conditions of that norm changed, i.e. when the structure of the economy changed, that same conditional norm encouraged radical change in the work of Goskomstat and interest in the move to the SNA.

One could ask what is the counterfactual or how is this theory of conditional norms falsifiable? First, the alternative to Russia's experience on the SNA is the experience of most countries of the world, that is, half-hearted attempts or lower levels of implementation. So it is not the case that there was no choice but to implement the SNA at the level that Russia did. While the SNA has become hegemonic, its implementation has not. Second, this theory suggests that without the conditional Soviet norms, implementation of the SNA would be lower. Essentially these are the findings of the quantitative analysis which show that countries that shared Soviet economic and statistical legacies, had higher than average progress on the SNA, while other countries, controlling for level of economic development, fared worse in terms of SNA achievement. While we cannot go back in time, this theory suggests that given the existing Soviet conditional norms, without the structural change in economy, there would have been little interest in the move to the SNA, or a lower level of progress as measured on the UN scale.

This theory does not suggest that conditional norms are only associated with normatively positive outcomes. The conditional norms associated with the 1990s reforms are the same ones that helped prop up the Soviet statistical system for several decades. Moreover, by rationalizing the Soviet system both in the past and in the present, these norms enable Goskomstat as an organization to completely avoid any self-criticism or reflection on the failings of Soviet statistics, of which there were many. And, while these norms were crucial to the reform of economic statistics and the SNA, they did not change the culture or identity of the organization in general, though continued closer engagement with international statisticians may have a significant effect in the long run, and therefore problems with the conduct of the census and with demographic data in general have not been solved by the SNA reform.

From this case of Russia's experience with institutional reform, we might draw some more general lessons about the process of bureaucratic reform and compliance with international standards. First, the role of the economy in institutional reform must be moved beyond material incentives. The motivation and timing of institutional reform

may be related to structural changes in the economy, while such interests are not necessarily the result of material incentives. Similarly, resources are crucial for implementation of reform, and can play a facilitating role, although as such they do not constitute an explanation of the source of interest in reform.

Second, most norms are conditional upon identities, but some are further conditional upon non-identity based factors. If we specify the conditions under which norms apply, we gain valuable information about the limitations as well as "stickiness" of norms. Norms tend to be developed over long periods of time, this means they are neither easy to create nor easy to change; but their conditions may well be subject to short term changes. In considering the role of norms in institutional reform, a focus on the long-term development of professional organizations and professional identities as well as a focus on the stability of their conditions will inform understanding of institutional reform.

Third, this case of SNA reform may be a way to understand the relationship between international standards or templates and the responsiveness of local conditions or domestic demand for reform. Conditional Soviet norms allowed Goskomstat officials to be at the same time pro-Soviet and pro-international community. Thus, international standards were not forced on Goskomstat employees in the 1990s; instead interest in reform was generated internally. This long-term interaction through organizational identities and norms is a departure from models that posit a dichotomy between international standards and domestic interests.

Fourth, this analysis of the experience of Russia and other post-Soviet states in the implementation of the SNA brings some clarity to the meaning of historical legacies. The quantitative analysis identified FSU and Comecon membership as being significant for SNA achievement levels, and the theory of conditional norms identified a concrete mechanism, namely Soviet norms about the economy and statistics, by which membership in the FSU or Comecon translates into interest in the SNA and hence achievement on the UN scale. The analysis here suggests that future research on bureaucratic and institutional reform should be attentive to the norms that allow actors in particular times and places to define their interests.

**Table 1**

Norms that guided Goskomstat's move to the SNA

<b>Identity group for whom norm applies</b> (actors, time, place)	<b>Norm content</b>	<b>Conditional Property</b> (if/when)	<b>Action or Consequence</b> (then)
International statisticians, since the 1960s	The SNA is the only appropriate way for countries to organize national economic statistics		
Soviet and Russian statisticians, since the 1960s	Statistical systems should correspond to economic systems <ul style="list-style-type: none"><li>• When there were two types of economic systems, there needed to be two types of statistical systems</li><li>• As economic systems change, so should statistical systems</li></ul>	Type of economy (price-based or planned)	Type of statistical system (Soviet or SNA)

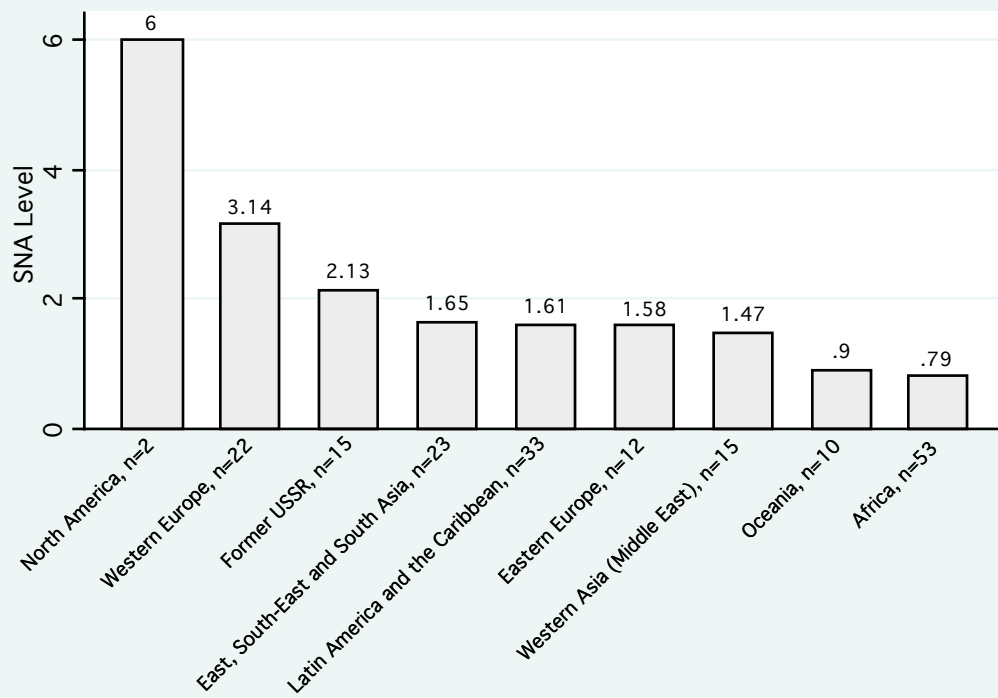
**Table 2**

The effect of wealth and region on SNA level  
(OLS regression coefficients, standard errors in parentheses)

	Model 1	Model 2	Model 3
GDP per capita (average 1992-1997)	0.0000901*** (0.000012)	0.0000909*** (0.0000121)	0.0000919*** (.000012)
FSU states	0.8181487** (0.3378935)		
Eastern Europe and FSU states		0.5911763** (0.2628062)	
Comecon states			0.7478762*** (0.2747663)
Constant	1.07215 (0.115239)	1.048363 (0.1198894)	1.032431 (0.1184276)
Number of Obs	185	185	185
F=	(2,182) 29.65	(2,182) 29.13	(2,182) 30.64
Prob > F =	0	0	0
R-squared =	0.2458	0.2425	0.2519
Adj R-squared =	0.2375	0.2342	0.2437
Root MSE =	1.249	1.2516	1.2438
** significant at the .05 level, *** significant at the .01 level			

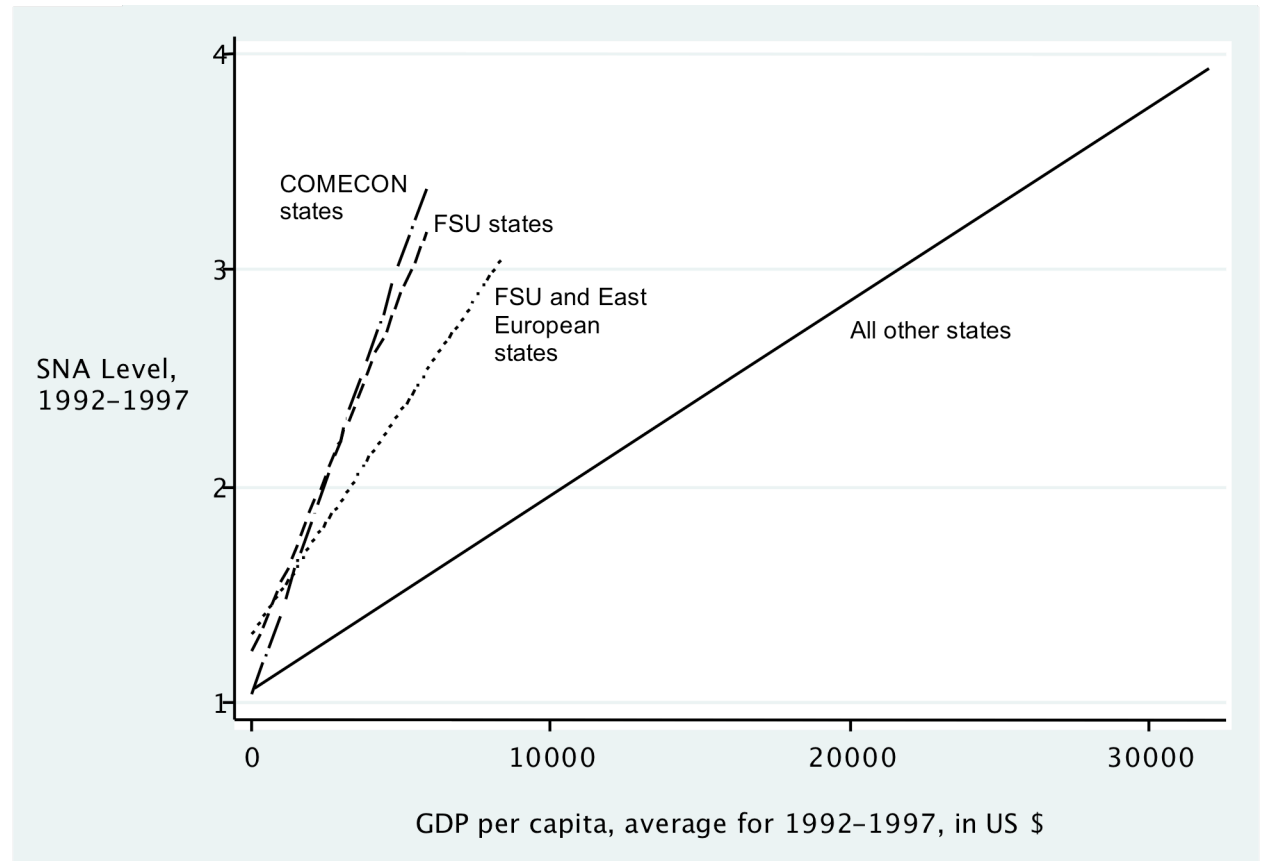
**Figure 1**

Average SNA achievement level by world region, 1999



**Figure 2**

Predicted Values of GDP per capita on SNA levels,  
for FSU, COMECON, Eastern European, and other states



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